

TOUR GUIDE

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First Baptist Church of *Woodstock*

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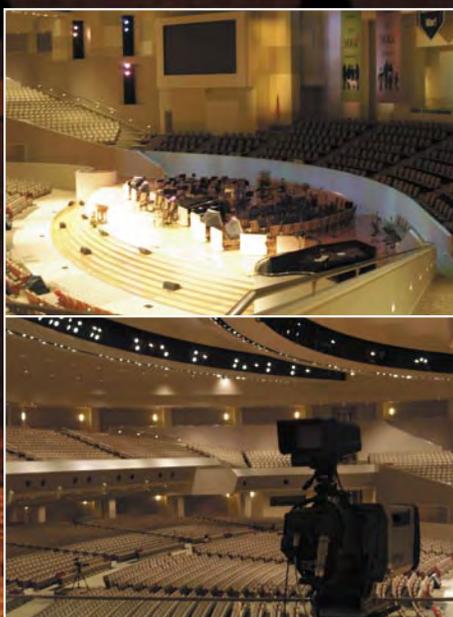
From Stereos to the Beatles
to *Mega Churches*

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Brings Technology to Houses of Worship





IT'S MORE THAN A CHURCH IT'S A MAJOR LEAGUE PRODUCTION FACILITY

By Michael A. Beck

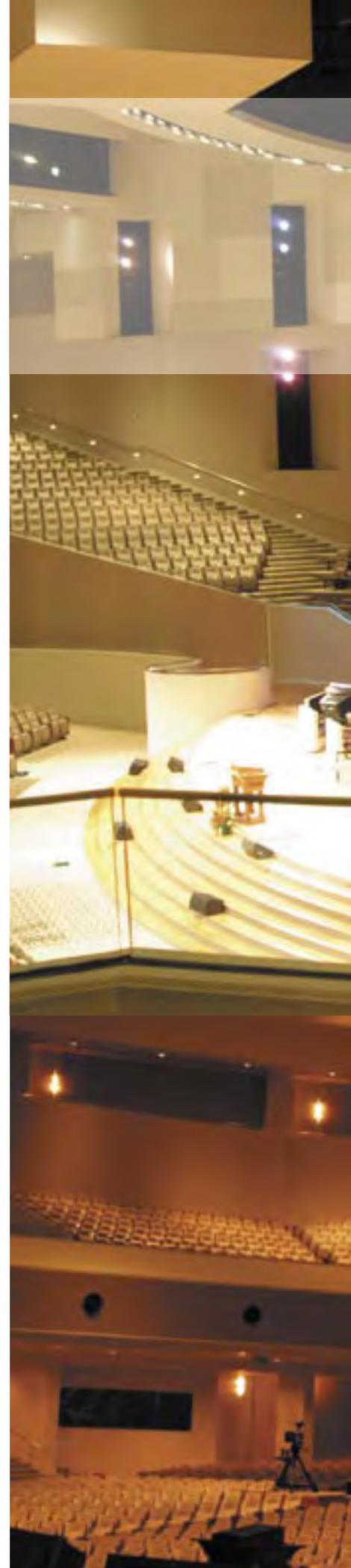
To many working in our business, it may not be apparent that there is a very real and viable production effort being put forth in the church or “house of worship” world. Take, for example, First Baptist Church of Woodstock in Woodstock, Georgia. Slated for groundbreaking the week of September 11th, 2001, plans had to be put off for very obvious reasons. But the project was by no means scrubbed. One year later, ground was broken and 2 years after that, at a cost of roughly \$62 million, the building was handed over to the congregation, complete with a \$3.2 million Audio/Video/Lighting package.

The sanctuary seats 7,500 people. It has a choir loft with room for 300 and space for a huge orchestra. In a building that would be used to facilitate everything from a regular church service to theatrical productions to major touring concerts, the integration of audio, video and lighting systems would have to play very well together. As a result, the room has some interesting challenges from every perspective. During the worship service, audio needs run the gamut from delivering the sound of powerful hymns to kicking in on edgy contemporary praise songs. Then there is the sermon. Pastor Johnny Hunt is a dynamic speaker who commonly goes from loud and boisterous to soft tones that border on a whisper.

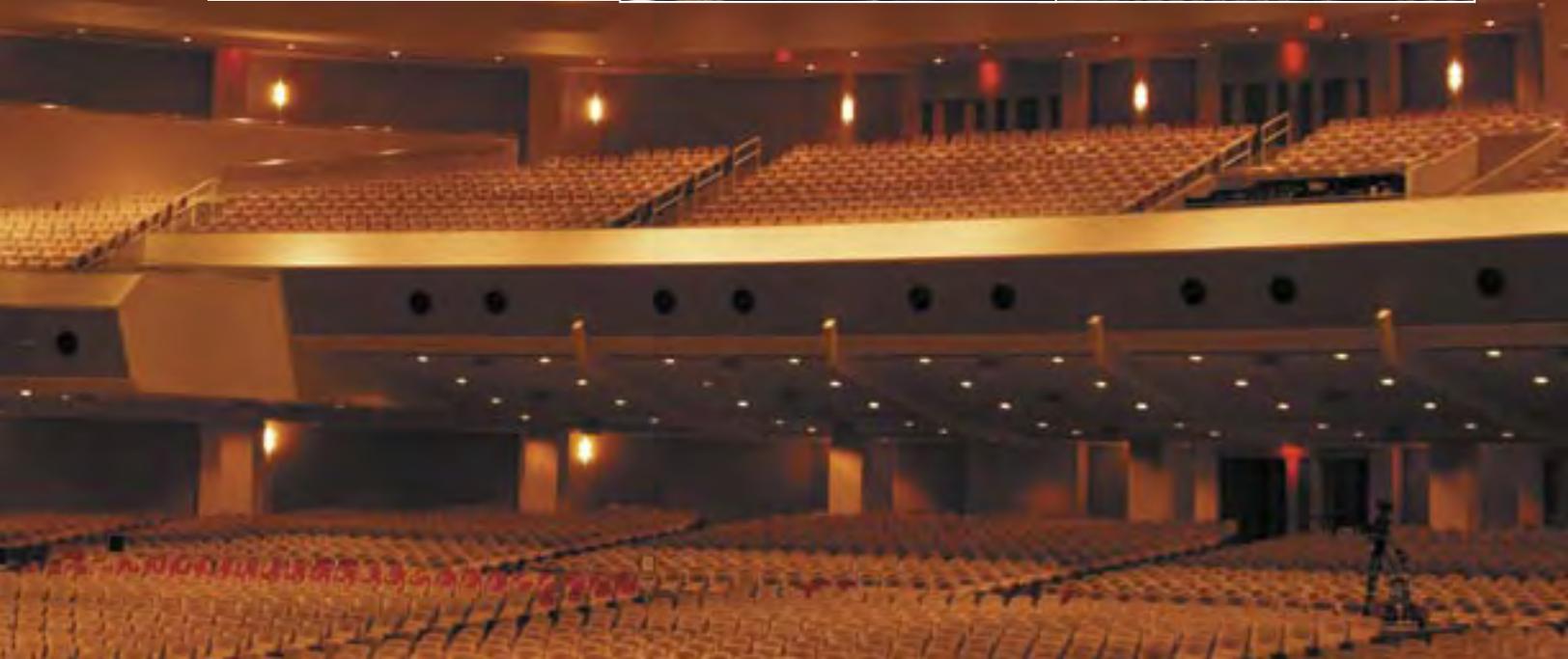
“Obviously the audio has to be delivered to every seat with complete uniformity,” says System Designer Bill Thrasher. “The good thing about this project was that they [FBC Woodstock] were smart enough to bring us in on the front end of the design process. We were five years on this project from beginning of the design to completion.” Bill Thrasher Design Group designed the audio and video systems and handed installation and integration over to Atlanta-based Baker Audio.

The main house sound system is driven by 75,000 watts of power. Baker pulled over 20 miles of cable. Baker Vice President Jason Hicks tells *TG7*, “With any job this size, [it] is always going to have its challenges. The biggest one in this project was the cabling of a facility of this size.” VP of Operations Jon Whitwell chimes in, “Brasfield & Gorrie was the general contractor and they really did a great job providing all the pathways for us. The big challenge was to bring the audio and video systems together in several designated spaces throughout a multilevel facility through several riser closets and dealing with several different main amplifier rooms.”

Once that was wired, next came the task of getting the signal where it was needed. In addition to the state-of-the-art system in the sanctuary, the building also boasts two full-blown recording studios that are busy much of the time and a very impressive orchestra rehearsal room. Bill Thrasher talks about the rehearsal room, “They wanted a big room that they can get the orchestra into, as well as being able to do band concerts and recitals and even use it as a recording room. We were very concerned about the noise that might be coming up from the rooms that are below. So we put it on a floating floor and wound



First Baptist Church of Woodstock





up getting a pretty interesting acoustic quality out of it. Then we finished it off with adjustable wall treatment that can achieve variable acoustics for the room and we tied it all into the main system so that we could deliver 48 channels from that room to either one of the studios or to the sanctuary system.”

In speaking with Jamie Karnes, Technical Director for the church, concerning the rehearsal room, he reports that he can get the room as dead as any environment he’s been in. The audio mix in the main room is currently running around 130 channels and will ultimately handle 186. It is also the broadcast mix. Over 70 full-size equipment racks hold all of the head end equipment to run the system.

The number one recording studio control is capable of handling the same control load as the system in the main room through its Yamaha DM 2000 consoles. The room across from it, slated to become the tracking room, has a new Yamaha O2R 96, while another room will be used for mixing. The rooms are being used every week both for in-house projects as well as paying projects. “It’s not like anyone is getting rich off of these studios. Primarily, we charge in order to protect our time,” says Karnes. “But you’d be surprised how much more efficient people will be when they’re paying to use the space. And we also have to pay technicians for their time when they come in to work the sessions.”

The recording system is Steinberg Nuendo. The system in the studio has just been upgraded to 2 - 3.2G processors with an 800 MHz transfer rate, is saving data to 2 - 300G, 1,000rpm SCSI drives. The whole thing runs on Windows as per the advice of the manufacturer of the software.

Dual video projection systems, over 10,000 Lumens each, accompany a 4-camera digital broadcast system supported by a triax backbone. The video system is set to deliver image, sermon notes and song lyrics in the sanctuary. There is also a broadcast signal being switched simultaneously for web casting as well as to locations around the building during functions being held in the main room. The phrase “locations around the building” holds great meaning. These include interpretation rooms, childcare and administration offices, and etc. There is also informational data being sent to countless video monitors in the public areas everywhere in the facility.

Then there is the lighting. The general lighting in the ceiling of the sanctuary is achieved with the use of over 300 ETC Source Four PARs and PARncls. The stage is lit with a variety of source four lekos at overhead, back and FOH positions. The challenge is that the average throw to the stage area is 80 feet. The lighting system is controlled through ETC dimming and controlled with the ETC Emphasis system. The room is primarily lit for television and the focus is locked. When there is a need for extra lighting for a concert or theatrical program, gear for the program is rented. Although plans are on the books to lay in 16 to 20 movers, says Karnes, “We have been looking at buying moving lights for about a year now so that we can reduce the amount of renting that we do for our in-house productions. We looked at the Vari-lite 3500’s a year ago and they really did the job. We just saw the Clay Paky 1200’s about a month ago and they really blew us away. But it’s been so long since we saw the VL’s that we want to see them together. So we’re going to have a shoot out here in the next few weeks.”

With more and more touring Contemporary Christian Artists doing performances in churches, these *mega-churches* are paying attention to the rigging needs so that touring shows can come in without having to alter their show for floor support. Karnes comments, “One of the reasons why we left the ceiling area open over the stage area was because we were paying close attention to the rigging needs of events that we knew would be taking place here.”

But concert production isn’t the only event that is coming in. FBC Woodstock is hosting more and more conference and convention events as well. Here at *Tour Guide* we pay close attention to production venues. And when one thinks about that term, the phrases *church* or *house of worship* don’t always come to mind. But one look at this leviathan facility and the technology it employs, and it’s hard to not see a time when serious touring Christian events could do entire tours hitting only churches as their primary venues. ¶



BILL THRASHER DESIGN GROUP

Brings Technology to Houses of Worship

By Michael A. Beck



Designing the acoustics for a church is a very complicated issue because of the broad dynamic scope of what is going to be done there. There is everything from shouting from the pulpit to the soft-whispered and even tearful tones of someone giving a testimony of how they came to their point of faith. There is the thunderous power of a huge choir singing “How Great Thou Art” or “The Hallelujah Chorus,” accompanied by an equally powerful orchestra, and then there is the children’s choir singing in gentle voices. And of course there is

the rocking sound of Contemporary Christian Music. It’s all done in the same room, and often all in the same event.

Every bit of the sound has to be heard by every person in every seat. Oh, and let’s not forget that it all has to *look* good. So how does this all get done? In the case of the gigantic First Baptist Church of Woodstock (and many others like it), it’s Thrasher Design Group, Inc., to the rescue. Bill Thrasher has been working acoustics both on the road and in fixed installations for over 30 years. Now Thrasher applies his ear and eye, his experience, and his talent to consulting and designing for churches and theme parks.

“I’m very picky about the work that I take on,” Thrasher tells *TGJ*. “Actually, what I’m picky about is *when* we come in on the project. I have to be adamant about coming in on the very beginning of the design process. If we come in too late,” he continues, “There will invariably be changes that have to be made and that costs money and time. When the new guy comes in late and costs that kind of money as his first order of business, he doesn’t make friends and rarely keeps the job.” That is just not the case with new construction. When *TGJ* spoke with Thrasher, he was in Greensboro, South Carolina, doing a refit on a church where he says, “Almost half of the seats in the room

couldn’t hear a word that was being said from the pulpit or the choir.”

In the case of FBC Woodstock, Thrasher comments that TDGI was brought in early enough that it was able to have a strong influence, almost from the beginning of the project, to work on the video and sound design elements of the building. In most church projects he is hired by the church, as opposed to being hired by the general contractor. Therefore, Thrasher has a good deal more clout when he has to go head-to-head with the architect when certain elements of the building design have to be built around the needs of audio, video, or lighting. Such was the case with FBC Woodstock, which was an existing client for Thrasher. He reports, “We had done three other projects with Woodstock, so there was a very strong element of trust there. Audio, video and lighting were high priority issues in this new building, and they wanted them done well. Jamie Karnes (Woodstock’s Technical Director) was very involved in getting it right.”

While most of the buildings that Thrasher works on are about half the size of the Woodstock project (7,500 seats), the company has worked on bigger jobs. BTDG just recently finished work on Idlewild Baptist Church in Florida, a 5,500 seat sanctuary that is considerably smaller than Woodstock. But the whole project was much bigger, according to Thrasher, given that there were four other buildings apart from the main room on the campus that all had major AV&L needs.

Thrasher Design Group, Inc., remains busy all of the time. And, as the faith community continues to grow in its attention to the technology of making sure that everyone in the building hears and sees all that is being done, and hears and sees it well, it doesn’t look like Thrasher’s work load is going to slow down any time soon.

Bill Thrasher Design Group can be found at tdgi.net. 📞

